

CLAIMS

1. A lumbar or thoracic spinal implant comprising:

a graft comprised of a solid body of substantially cancellous bone sized and shaped for placement between two lumbar vertebral bodies, wherein the implant is capable of bearing weight in the lumbar or thoracic spine of a human being.

2. The implant of claim 1, wherein the graft is an allograft.

3. The implant of claim 2, wherein the allograft is comprised of at least about 60% cancellous bone by volume.

4. The implant of claim 2, wherein the allograft is comprised of at least about 80% cancellous bone by volume.

5. The implant of claim 2, wherein the allograft is comprised of at least about 95% cancellous bone by volume.

6. The implant of claim 2, wherein the allograft is comprised of at least about 98% cancellous bone by volume.

7. The implant of claim 6, wherein the surface area of the implant in contact with the vertebral bodies comprises at least 98% cancellous bone.

8. The implant of claim 1, wherein the bone source comprises calcaneus.

9. The implant of claim 7, wherein the contact surface area of the implant is greater than about 6 square centimeters.

10. The implant of claim 1, wherein the implant is capable of bearing a load of greater than about 500 pounds.

11. A lumbar spinal implant comprising an allograft comprised of calcaneus.

12. The spinal implant of claim 11, wherein the allograft is in the form of a solid body.

13. The spinal implant of claim 12, wherein allograft is sized and shaped for placement between two lumbar or thoracic vertebral bodies and capable of bearing weight in the lumbar spine of a human being.

14. The spinal implant of claim 13, wherein the allograft is capable of bearing 1000 pounds.

15. The spinal implant of claim 14, wherein the implant comprises a thin cortex partially surrounding a core of cancellous bone.

16. The spinal implant of claim 15, wherein the surface area in contact between the intervertebral bodies and the implant comprises at least about 80% cancellous bone.

17. The spinal implant of claim 15, wherein the contact surface area between the intervertebral bodies and the implant comprises at least about 98% cancellous bone.

18. The spinal implant of claim 11, wherein the implant has a thickness between about 0.5 centimeters and 5 centimeters.

19. A method of performing a spinal fusion on a patient comprising:

implanting a graft comprising substantially cancellous bone between lumbar or thoracic vertebral bodies.

20. The method of claim 19, graft is an allograft.

21. The method of claim 20, wherein the allograft comprises calcaneus.

22. The method of claim 20, wherein the surface area in contact between the allograft and the vertebral bodies is at least about 6 square centimeters.

23. The method of claim 20, wherein the allograft has a weight bearing capacity of at least about 1000 pounds.

24. A lumbar or thoracic spinal implant comprising:

an allograft comprised of a solid body of bone comprised of at least about 10% cancellous bone by volume sized and shaped for placement between two lumbar or thoracic vertebral bodies, wherein the implant is capable of bearing weight in the lumbar or thoracic spine of a human being.

25. The implant of claim 23, wherein the allograft is capable of bearing 1000 pounds.

26. A method of making an allograft lumbar or thoracic spine implant comprising:

cutting a portion of the calcaneus from a donor in a size and shape for insertion between two vertebral bodies.

27. The method of claim 25, wherein a plurality of cross sections is cut substantially perpendicular to the long axis and from a central portion of the calcaneus.

28. The method of claim 26, further comprising cutting at least a portion from one of the cross sections to provide an implant for use in a anterior interbody lumbar fusion procedure.

29. The method of claim 27, comprising cutting the portion to provide two or more subsections to provide an implant for use in a transforaminal lumbar interbody fusion or posterior interbody lumbar fusion.

30. A method of performing a spinal fusion on a patient comprising:

obtaining a graft comprised of substantially cancellous bone;

storing the graft; and

implanting the graft in the lumbar or thoracic spine.